# **Professor of Astronomy**





Monika Kress Professor of Astronomy San Jose State University

I am a professor of astronomy at San Jose State University. I do research for NASA during the summer. I use computers to figure out how planets form, and what they are made out of.

My areas of expertise

• Physics

# How I first became interested in this profession

When I was a little girl, I would spend a lot of time wondering why things were the way they were. I can remember lying in the grass looking up on a windless day. Yet, the clouds were moving by, and I wondered whether it was because the earth was turning or because there was wind higher up. (I now know that it's because there can be wind high up when there is no wind near the ground!) I spent an awful lot of time just wondering about things, and I was also very good at math—I tried to figure out quicker ways of doing my math homework!

# What helped prepare me for this job

Getting a good education, with lots of science, math, and computers, was the biggest help. But I took advantage of every opportunity that came my way; I pushed myself to try new things and to open myself up to new experiences. This helps in all aspects of life—not just in being a scientist!

# My role models or inspirations

I didn't really have any role models. I never met any scientists before I went to college. I can remember liking Carl Sagan on his TV show Cosmos. And I always loved those TV shows about dinosaur hunters—I knew I wanted to do what they did, or something like it.

# My education and training

- B.S. Physics, Rensselaer Polytechnic Institute
- Ph.D. Physics, , Rensselaer Polytechnic Institute

# My career path

- · Summer job in astronomy research
- NASA Ames Research Center to finish my Ph.D.
- Post-doctorate at NASA Ames Research Center
- · Post-doctorate at the University of Washington in Seattle
- Part-time teaching at small colleges

# What I like about my job

I like that my job involves working with a lot of people, both students and my research colleagues. I hate sitting in my office alone! It is very rewarding to see the light bulb go on over my students' heads. Also, I love to travel, and I have been able to go to the most amazing places in this job, including Antarctica, Korea, Poland, Spain, Germany, and all over the US. This summer, I will be going to China for the first time, to attend a conference there and present my research.

# What I don't like about my job

I do not like that sometimes I feel pressured when my research life encroaches upon my teaching, and vice versa. I find I cannot neglect one over the other, and when I am trying to be all things to all people, I can get very stressed out.

# My advice to anyone interested in this occupation

Take every math and science course offered at your school. Major in science in college, but take writing classes also, even if they are not required. Once you get through college, be prepared for a lot of relocating, and I don't mean just down the street. This is not the kind of job where you can live in one place for your entire life. Chances are, you will live in at least three different states at different times during your career, and I know some people who have lived in as many as 7 or 8 different places over the years. Or more. And, an advanced degree in science does not mean you'll be making a ton of money! You will be comfortable but not rich. You have to do it ultimately because it is rewarding and interesting.